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10/769,127	01/30/2004	Ping Mei	200209576-1	8740

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INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

TRAN, THANH Y

ART UNIT	PAPER NUMBER
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2892

NOTIFICATION DATE	DELIVERY MODE
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03/13/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Dai (U.S. 5,877,076).

As to claim 1, Dai discloses in figures 3i-3k a method for forming a semiconductor device comprising: forming a 3-dimensional pattern (see 161' and 151' in figure 3i) in a substrate (110); and depositing at least one material (180) over the substrate (110) in accordance with desired characteristics of the semiconductor device. It should be noted that: elements 161' and 151' inherently create a 3-dimensional pattern in a substrate so that the material 180 can be deposited within a 3-dimensional pattern.

As to claim 13, Dai discloses in figures 3i-3k a system for forming a semiconductor device comprising: means for forming a pattern (see 161' and 151' in figure 3i) in a substrate (110) wherein the pattern is 3-dimensional; and means for depositing at least one semiconductor material (180) over the substrate (410) in accordance with desired characteristics of the semiconductor device.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dai (U.S. 5,877,076) in view of Taussig et al (U.S. 6,861,365).

As to claims 3, 14, and 17, Dai does not disclose the semiconductor device comprises a cross-point memory array or at least one of a transistor, a resistor, a capacitor, a diode, a fuse and an anti-fuse.

Taussig et al discloses in figures 1, 2a-2b, and 4a-5 a method for forming a semiconductor device, wherein the semiconductor device comprises a cross-point memory array (see col. 3, lines 61-67); or at least one of a transistor, a resistor, a capacitor, a diode, a fuse and an anti-fuse (see claim 8 and col. 4, lines 14-20). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the apparatus of Dai by having a semiconductor device which comprises a cross-point memory array or at least one of a transistor, a resistor, a capacitor, a diode, a fuse and an anti-fuse as taught by Taussig et al for the purpose of intended use.

Allowable Subject Matter

5. Claims 2, 4-10, 15-16, 18-20, and 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 12/11/2007 have been fully considered but they are not persuasive.

Applicant argued that Dai reference does not disclose forming a 3-dimensional (3D) pattern in a substrate.

In response, the examiner disagrees with applicant's argument because figures 3i-3k of Dai clearly discloses an apparatus and a corresponding method comprising: forming a 3-dimensional (3D) pattern (see elements 161' and 151' in figure 3i) in a substrate (110). Applicant should note that: elements 161' and 151' inherently create a 3-dimensional pattern in a substrate so that the material 180 can be deposited within a 3-dimensional pattern. And with respect to the Merriam-Webster's Dictionary, 10th Edition, the term "in" is defined as a function word to indicate inclusion, location, or position within limits. And Dai reference does disclose that a 3-dimensional (3D) pattern positioned within limits of the substrate (110).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Y. Tran whose telephone number is (571) 272-2110. The examiner can normally be reached on M-F (9-6:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thao X Le, can be reached on 571-272-1708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/T. Y. T./
Examiner, Art Unit 2892

/Thao X Le/
Supervisory Patent Examiner, Art Unit 2892

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